



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/695,632

10/27/2003

Brian G. Connor

HYZ-038US01

6413

959 7590 06/24/2008

LAHIVE & COCKFIELD, LLP
ONE POST OFFICE SQUARE
BOSTON, MA 02109

EXAMINER

DOWE, KATHERINE MARIE

ART UNIT

PAPER NUMBER

3734

MAIL DATE

DELIVERY MODE

06/24/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/695,632	Applicant(s) CONNOR ET AL.	
	Examiner KATHERINE M. DOWE	Art Unit 3734	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 March 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3,6-17,20-22,24-26,29-31,39-53,55-60,62,63,65,66,68 and 69 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3,6-17,20-22,24-26,29-31,39-53,55-60,62,63,65,66,68 and 69 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The following is a complete response to the amendment filed 3/21/2008.
2. Claims 1-3, 6-17, 20-22, 24-26, 29-31, 39-53, 55-60, 62, 63, 65, 66, 68, and 69 are currently pending.

Claim Rejections - 35 USC § 102

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
4. Claims 1-3, 6-17, 20-22, 25, 26, 29-31, 43-48, 50-53, 55-60, 62, 63, 65, 66, 68, and 69 are rejected under 35 U.S.C. 102(b) as being anticipated by Patterson et al. (US 5,944,686). Patterson et al. disclose a surgical instrument (Figs 1 and 2) comprising a nozzle (30) for forming a liquid jet, a pressure lumen (26) to convey liquid flow (32) to the nozzle, an evacuation lumen (24, 46) comprising a jet receiving opening (36) opposite the nozzle, a stationary non-liquid tissue-excision component (40) to excise tissue during the surgical procedure. The proximal end of the evacuation lumen may be interpreted as the tissue receptacle since the evacuation lumen draws debris and effluent away from the surgical site (col 3, ln 32). The pressure lumen is capable of conveying a high-pressure liquid of 50,000 psig (col 3, ln 14-16). The distal end of the instrument is capable of being inserted into the spine of a patient. The proximal end of the instrument comprises a handle (50). The device may be considered a curette device since it is capable of incising or excising tissue.

Claim Rejections - 35 USC § 103

5. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

6. Claims 1-3, 6-17, 20-22, 24-26, 29-31, 39-53, 55-60, 62, 63, 65, 66, 68, and 69 are rejected under 35 U.S.C. 103(a) as being unpatentable over Moutafis et al. (WO 00/69348) in view of Patterson et al. (US 5,944,686). Moutafis et al. disclose the invention substantially as claimed including a surgical instrument (Fig 1) comprising a nozzle (116) for forming a liquid jet, a pressure lumen (110) to convey liquid flow (120) to the nozzle, an evacuation lumen (112) comprising a jet receiving opening (118) opposite the nozzle, and a tissue receptacle (140) to contain excised tissue. The pressure lumen is capable of conveying a high-pressure liquid of 50,000 psig (pg 23, In 26-27). The distal end of the instrument is capable of being inserted into the spine of a patient. The proximal end of the instrument comprises a handle (106). The evacuation lumen is shaped and positionable to enable evacuation of essentially all of the liquid comprising the liquid jet without the need of for an external source of vacuum (pg 25, In 31 – pg 26, In 2). A portion of the instrument may be able to be reused, while a portion is disposed of after a single use, or the entire instrument may be disposed of after a single use (pg 26, In 7-22).

However, Moutafis et al. do not disclose a non-liquid jet tissue-excision component. Patterson et al. disclose a similar surgical instrument comprising a nozzle (30) for forming a liquid jet, a pressure lumen (26) to convey liquid flow (32) to the nozzle, and an evacuation lumen (24, 46) comprising a jet receiving opening (36)

opposite the nozzle. Patterson teaches the distal end of the instrument may include a sharpened edge and tip forming stationary non-liquid tissue-excision component (40, 42) to excise tissue during the surgical procedure. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the device of Moutafis et al. to include a stationary non-liquid tissue-excision component in the form of a sharpened distal end of the evacuation lumen to help excise tissue to obviate the need of introducing a second mechanical excision instrument into the target tissue area when simple mechanical abrasion is desired.

Response to Arguments

7. Applicant's arguments regarding Patterson et al. (US 5,944,686) filed 3/21/2008 have been fully considered but they are not persuasive.

8. Regarding claims 1-3, 5-17, 20-22, 25, 26, 29-31, 43-48, and 50-53, Applicant argues Patterson does not disclose an evacuation lumen comprising a jet-receiving opening locatable opposite the nozzle and a non-liquid jet tissue-excision component constructed and positioned to excise tissue during the surgical procedure. The Examiner respectfully traverses Applicant's remarks. First, the jet receiving opening is defined by the deflector 36 to include the open area between the distal end of the nozzle 30 and distal tip of the deflector 38.

Second, in response to applicant's argument that the sharpened edge 40 of Patterson is a tissue-*incision* component and not a tissue-*excision* component, a recitation of the intended use of the claimed invention must result in a structural

difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. It is noted that the features upon which applicant relies (i.e., the specific structure that enables *excision*) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

9. Regarding claims 55-60, Applicant argues Patterson does not disclose a tissue receptacle configured and positioned to contain tissue. The Examiner respectfully traverses Applicant's remarks. A recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. The proximal end of the evacuation lumen is designed to contain tissue for at least a brief time as tissue is drawn away from the surgical site. Furthermore, the proximal end of the evacuation lumen is *capable* of containing tissue such that the excised tissue collects or accumulates. Thus, Patterson does disclose a tissue receptacle configured and positioned to contain tissue.

Furthermore, Applicant argues the liquid jet of Patterson is not configured so that at least a portion of the liquid jet is contained within the receptacle. Again, the Examiner traverses Applicant's remarks. The liquid jet 32 is defined by the liquid exiting nozzle 30. Thus, a portion of the liquid jet is capable of deflecting off deflector 36 in a harmless

Art Unit: 3734

fashion to pass back towards the evacuation lumen to be contained within the receptacle. If the prior art structure is capable of performing the intended use, then it meets the claim.

10. Regarding claims 62, 63, 65, and 66, Applicant additionally argues the proximal end of the evacuation lumen is not cup-shaped. The Examiner respectfully traverses Applicant's remarks. The evacuation lumen is cylindrically shaped with a rounded interior and thus may be considered "cup-shaped".

11. Regarding claims 68 and 69, Applicant argues Patterson does not disclose a curette device. The Examiner respectfully traverses the Applicant's remarks. Applicant acknowledges Patterson discloses a sharpened edge 40. Thus, the device is capable of incising or excising tissue and may be interpreted as a curette.

12. Applicant's arguments regarding Moutafis et al. (WO 00/69348) in view of Patterson et al. (US 5,944,686) filed 3/21/2008 have been fully considered but they are not persuasive.

13. Regarding claims 1-3, 4-17, 20-22, 24-26, 29-31, and 39-53, Applicant argues Patterson does not bridge the deficiencies of Moutafis since Patterson allegedly does not disclose a non-liquid jet, non-rotating tissue-excision component. The Examiner respectfully traverses the Applicant's remarks and directs Applicant to the above arguments regarding Patterson.

14. Regarding claims 55-60, 62, 63, 65, and 66, Applicant argues the nozzle 140 of Moutafis is not positioned to direct the liquid jet so that at least a portion of the liquid jet

is contained within the receptacle 140 when the instrument is in operation. Moreover, Applicant argues that by the time the liquid reaches the receptacle 140, it can no longer be considered a "liquid jet". The Examiner respectfully traverses the Applicant's remarks. The liquid jet is defined by the liquid exiting the nozzle 116, which is the same liquid that is contained within the receptacle 140.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., the receptacle being used to manipulate tissue and not being located remotely from the nozzle) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

15. Regarding claims 68 and 69, Applicant argues the prior art does not disclose a curette device. The Examiner respectfully traverses the Applicant's remarks. When Moutafis is modified in view of Patterson to include a non-liquid jet tissue-cutting component, the device may be interpreted as a curette device since it is capable of incising or excising tissue.

Conclusion

16. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to KATHERINE M. DOWE whose telephone number is (571)272-3201. The examiner can normally be reached on M-F 8:30am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jackie Ho can be reached on (571) 272-4696. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3734

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Kevin T. Truong/
Primary Examiner, Art Unit 3734

Katherine Dowe
June 20, 2008

/K. M. D./
Examiner, Art Unit 3734